Theater Effects-based Operations (TEBO) ACTD Proposal FY 04

Problem: Combatant Commanders lack the tools to rapidly and effectively conduct analysis, planning, decision-making, execution, and dynamic and predictive assessment of joint and combined Effects-based Operations (EBO) at the strategic and operational levels. A solution is required that provides decision-aiding technologies and software applications to: (1) develop a comprehensive knowledge base of the adversary, ourselves and allies, and the environment (critical capabilities and vulnerabilities, centers of gravity and nodal analysis); (2) facilitate interactive effects-based campaign planning within a joint/combined context; (3) support execution with synchronization of actions, battle tracking and prioritization of strategic and operational levels of effort; and (4) dynamically assess and predict progress toward the desired end-state by analyzing observed direct and indirect effects to facilitate adaptation of the plan.

Objectives: Develop a strategic and operational level EBO framework that supports transformation and is readily adaptable to all Combatant Commands; and provide operational and system architectures, tools and procedures to equip the Commander with Decision Superiority.

Participants:

Lead Service: US Army User/Sponsor: CFC/USFK

Demonstration Mgr: Joint Precision Strike Demonstration (JPSD) Project Office

Operational Mgr: USJFCOM Transition Mgr: TBD

Schedule:

- FY04: Technology transfer from AFRL EBO ATD, JWAC, JPSD, JFCOM and other sources; Exploit lessons learned (Millennium Challenge 02, Operation Enduring Freedom); Baseline USFK's EBO process (UFL 03/04)
- FY04-06: Develop, integrate, demonstrate, assess and iterate via spiral development cycles (Olympic Challenge 04 and UFL 05/06)
- FY07-08: Residual support within Korean theater; Migrate to other theaters
- FY09: Transition to acquisition

Technologies (High Leverage, Low Development, Full Integration):

- Applications that assist in identifying adversary capabilities and vulnerabilities (Centers of Gravity)
- Modeling technologies to produce predictive and interactive planning capability (COA option generation, evaluation, and selection)
- Optimized Asset-to-Target/Task pairing (Application of resources)
- Automated support for effects analysis (direct and indirect; intended and unintended; and cumulative and cascading); and attack effectiveness assessment (Dynamic and Predictive Assessment)

Residuals:

- Validated DII COE compliant applications/tools integrated into CFC/USFK C4ISR Architecture, joint and combined EBO TTPs; subsequently migrated to other Combatant Commands
- Ultimately, transitioned to PM and integrated into GCCS

Comments:

Risks

- Funding: Low
- Schedule: Low
- Technical: Low/Medium

POCs

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